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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,629	10/09/2001	Jing Cheng	ART-00105.P.1.1-US	6241

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SAN DIEGO, CA 92130

EXAMINER
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LAM, ANN Y

ART UNIT	PAPER NUMBER
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1641

DATE MAILED: 09/24/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/973,629

Applicant(s)

CHENG ET AL.

Examiner

Ann Y. Lam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed September 9, 2002 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. (The copies of documents listed under "Other Documents" was not found by examiner.)

### ***Election/Restrictions***

Applicant's election with traverse of the restriction requirement in Paper No. 5 is acknowledged. The traversal is on the ground(s) that because the claims are patentably distinct, are not independent and are connected by a single searchable unifying element, namely an integrated biochip system, Examiner would not be seriously burdened by examining these claims together. This is not found persuasive because, as previously explained, the product as claimed can be used in a materially different process of using the product and the search for the method claims are different for the product claims.

The requirement is still deemed proper and is therefore made FINAL.

***Double Patenting***

1. Claims 1-18 are rejected under the judicially created doctrine of double patenting over claim 1 of U. S. Patent No. 6,403,367 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: Cheng et al. '367 discloses at least two active biochips (see column 1, lines 44-50, or column 7, lines 46-60) with a chamber (see column 6, line 20) wherein samples can be moved from one area of a chip to one other area of a chip by dielectrophoresis (see column 6, lines 7-15.)

The chip is automated and is a multiple force chip (see column 1, lines 48-50.)

Two or more sequential tasks are performed (see column 5, lines 21-25 and column 6, lines 31-36.)

The sample is a blood sample (see column 5, line 43.)

The processing task is isolation using physical forces (see column 6, lines 34-36.)

The processing task of manipulation of moieties by applied physical forces is by manipulation of binding partners (see column 6, lines 46-58.)

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of

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the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheng et al., 6,403,367.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. For explanations, see subsection 3 below.

3. Claims 1-18 are rejected under 35 U.S.C. 102(g) as being anticipated by Cheng et al., 5,403,367.

As to the 102(e) and 102(g) rejections above, Cheng et al. '367 discloses at least two active biochips (see column 1, lines 44-50, or column 7, lines 46-60) with a chamber (see column 6, line 20) wherein samples can be moved from one area of a chip to one other area of a chip by dielectrophoresis (see column 6, lines 7-15.)

The chip is automated and is a multiple force chip (see column 1, lines 48-50.)

Two or more sequential tasks are performed (see column 5, lines 21-25 and column 6, lines 31-36.)

The sample is a blood sample (see column 5, line 43.)

The processing task is isolation using physical forces (see column 6, lines 34-36.)

The processing task of manipulation of moieties by applied physical forces is by manipulation of binding partners (see column 6, lines 46-58.)

4. Claims 1-8 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Austin et al. 6,203,683

Austin discloses an active biochip (10) with a chamber (see column 7, lines 9-10) wherein samples can be moved from one area of a chip to one other area of a chip by dielectrophoresis (see column 7, lines 54-65.)

The chip is automated and is a multiple force chip (see column 2, lines 57-60.)

Two or more sequential tasks are performed (see column 2, lines 57-60)

The sample is a water sample, or blood sample (see column 10, lines 42-50.)

The processing task is isolation using physical forces (see column 5, lines 9-11.)

The processing task of manipulation of moieties by applied physical forces is by manipulation of binding partners (see column 5, lines 9-15.)

5. Claims 1-8 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Blankenstein, 6,432,630,

Blankenstein disclose an active biochip with a chamber (see column 9, lines 1-4) wherein samples can be moved from one area of a chip to one other area of a chip by magnetophoresis (see column 9, line 5, and lines 28-31, and column 19, lines 33-36)

The chip is automated and is a multiple force chip (see column 8, lines 65-67.)

Two or more sequential tasks are performed (see column 5, lines 21-25 and column 6, lines 31-36, and column 11, lines 57-60.)

The sample is a blood sample (see column 24, lines 44-53.)

The processing task is isolation using physical forces (see column 9, line 5, and lines 28-31.)

The processing task of manipulation of moieties by applied physical forces is by manipulation of binding partners (see column 19, lines 33-36.)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Austin et al., 6,203,683.

Austin et al. disclose the invention substantially as claimed (see above), except for the system including at least two chips, wherein the system performs two or more sequential tasks using the at least two chips. Austin et al. do however teach that variations of the described embodiments of the inventions are possible without departing from the invention, as appreciated by those skilled in the art, see column 12, line 66 – column 13, line 3. Utilizing two chips, instead of one chip, for multiple analyses or for simultaneous analyses, to save time, for example, involves only routine skill in the art.

7. Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blankenstein, 6,432,630.

Blankenstein discloses the invention substantially as claimed (see above), except for the system including at least two chips, wherein the system performs two or more sequential tasks using the at least two chips. Utilizing two chips, instead of one chip, for multiple analyses or for simultaneous analyses, to save time, for example, involves only routine skill in the art.



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**Conclusion**

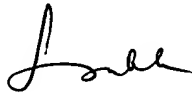
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Y. Lam whose telephone number is (703) 306-5560. The examiner can normally be reached on M-TH 8-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (703)305-3399. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-4242 for regular communications and (703)308-4426 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0196.

A.L.

September 22, 2003

  
LONG V. LE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

09/22/03